THE DIFFERENTIATING FACTORS OF LIFE INSURANCE OWNERSHIP: A CASE STUDY OF INDONESIA

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ABSTRACT

Despite a decrease in the amount of life insurance industry during 2000 to 2009 the growth of life insurance premiums are always higher than growth in other types of insurance premiums. This indicates the higher insurance ownership in the community. This study aims to find out if there a difference between those who have life insurance with a group that did not have life insurance. The research also determine whether the variables that distinguish these holdings. Discriminant analysis used to determine the differentiating factor. The results showed that there is a difference between individuals who have life insurance with whom that does not have life insurance. Human capital, bequest motive and life insurance awareness are variables that distinguishing between those who have life insurance and a group that did not have life insurance.

keyword: *human capital, bequest motive, absolute risk aversion, insurance awareness*

1. Introduction

Life insurance companies are companies that provide services in the underwriting risk associated with the life or death of an insured person (Article 1, Law No.2/1992). Life insurance companies can only conduct business in the life insurance, health insurance, accident insurance and annuity business, and became the founder and trustees of pension funds in accordance with laws and regulations applicable pension fund (Article 4 of Law No.2/1992). Law No.2/1992 defines insurance or coverage as an agreement between two or more parties, with which the insurer is binding to the insured, by accepting the insurance premium, to provide reimbursement to the insured for loss, damage or loss of expected benefits, or responsibilities legal responsibility to third parties that may be suffered by the insured, arising out of an uncertain event, or for payments based on death or life of an insured.

In 2009 Indonesia insurance industry premium income reached 106.4 trillion rupiahs, up 17.9% from 2008. The population of Indonesia at the end of 2009 reached 237.5 million. If the total premium is compared with the population it had passed all of expenditure of 395,202.7 rupiahs per capita or about 1.9% of income per capita in 2008 to 448,193.00 rupiahs per capita in 2009. Compared with average expenditures for life insurance of Japanese, this proportion of expenditure is very small. The Japanese average spending for life insurance is the highest in the world. They spend U.S. $ 3.103per capita (Swissre, 2000 in Pope, 2002).

Ratio of the amount insured by the number of residents in the life insurance industry over the past ten years has steadily increased, from 10.8% in the year 1996, 11.9% in 2000, at the end of 2006 reached 14.5%, and in 2008 reached 19%. There is the possibility that one person has more than one insurance policy, so people who really have an insurance policy are actually less than 14.5% of the population. The number of life insurance ownership is still not differentiated between participants with individual life insurance and life insurance group. Life insurance is usually followed by a collection of individual participants as to get them from the institution where they are working. The individual insurance purchased more because the individual's own volition.

Only 19% of the population of Indonesia is a life insurance policy holder (Bapepam and Finance Institute, 2008). Because each person can have more than one policy, the actual number of people who have life insurance is less than that number. In the side of economic we see the Indonesian income per capita is around 30,000,000 rupiahs per year (Bank Indonesia, 2009). The expenditure for insurance consumption in 2009 was 448.193 rupiahs per capita. The life insurance customers are still limited to urban communities. Viewing figures are lower than the policyholder ownership of the population can be ascertained there were groups of people who do not have life insurance, particularly in individual life insurance. Looking at that phenomenon, this study addresses the problems in Indonesia, is there a difference between individuals who have life insurance with the individual that does not have life insurance, when viewed from the side of individual behavior. The research wants to determine whether the variable that distinguishes between those who have life insurance with a group that did not have life insurance.

II. Research Methodology

This study is a survey research, conducted with 392 respondents who scattered in several major cities and districts in Java. The data used is the primary data obtained from respondents. Primary data are taken in the form of demographic data of respondents, their bequest motive, level of absolute risk aversion and the awareness of insurance. Samples were taken based on the accidental method. The data was collected by distributing questionnaires to the respondents in some places such as hospitals, offices, malls, campuses, visit homes and provide a questionnaire to several people who encountered. The questionnaire was to be closed and open questions.

The variables used in this research was based on the findings of Baek and De Vaney (2005) which states that life insurance demand is influenced by human capital, bequest motive and risk aversion. Based on the conditions in Indonesia, this study adds insurance awareness variable.

Human capital is the individual ability to earn income in the future. This variable was measured based on age and education of respondents. Education of respondents is measured from the level of formal education attained by respondents, which includes high school, Diploma, Degree and Postgraduate.

Bequest motive is the underlying motive or reason for individuals to leave a legacy for their children and those dependents in the event of death upon him. In this study the bequest motive will be measured from the number of dependents, namely the spouse's income, and amount of wealth. The spouse's Income in question is measured in a month. Number of dependents is meant the number of children held by the respondent and others whose lives are a burden for him. The wealth meant is the amount of wealth that belongs in a family, a form of real wealth and financial wealth

Risk attitude related to individual attitudes towards risk. In terms of the purchase of insurance is related to attitudes toward risk reduction in avoidance behavior as a result of the inability of the insured income for a living or loss of income due to death of the insured. To determine the level of risk aversion of the respondents, the open questionnaire is spread to those who describe their willingness to pay some money for various lotteries are acceptable at a certain level of probability. These results will be calculated based on the coefficient of absolute risk aversion of each respondent. Absolute risk aversion measured using an equation like that used by Hartog, Carbonell and Jonker (2000) as follows:

$$\rho = \frac{(\alpha Z - \lambda)}{\frac{\lambda^2}{2} + \alpha \frac{Z^2}{2} - \alpha \lambda Z}$$

Z : a loterry prize

λ : the probability of winning the prize

α : the maximum price that the individual is willing to pay for the lottery ticket

In the present study, awareness of life insurance is the respondent’s awareness of the life insurance services existence that can meet the needs of security. Because the respondents of this study included people who do not have life insurance so the measurement of life insurance awareness is limited on product understanding and product knowledge. The knowledge is measured by the introduction of various types of life insurance and its benefits. The product understanding is measured by the understanding of the various rules in the sale of life insurance.

Discriminant analysis was used to predict where the observation should be classified. Discriminant analysis used in two steps. The first step is to find out is there a difference between human capital variables, bequest motive, attitude and awareness of risk insurance. The second step performed to obtain the discriminant models that can be used to classify whether the respondent belongs to a group who have life insurance or group that does not have life insurance.

III. Result and Discussion

54.85% of the respondents did not have life insurance. Life insurance that meant in this study is private life insurance, not including life insurance and health insurance obtained from the institution where the respondent worked.

Table 3.1 : The value of Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1	.681	149.091	4	.000

Table 3.1 above shows that the chi square value of 149.091 is greater than the table value. Based on the value of Wilks' Lambda, it can be concluded that there are differences between the groups who have life insurance with a group that did not have life insurance.

Tabel 3.2: Tests of Equality of Group Means

	Wilks' Lambda	F	df1	df2	Sig.
humancapital	.911	38.006	1	390	.000
bequestmotive	.891	47.901	1	390	.000
awareness	.740	137.167	1	390	.000
absoluterisk	.999	.341	1	390	.559

Table 3.2 shows that the significance of human capital variables is smaller than the value of α (0.05) so that it can be concluded that human capital is not a variable that distinguishes between those who have insurance and who do not have life insurance. Human capital is the ability of individuals to earn income, so it can be said that the ownership of life insurance related to an individual's ability to earn income.

The result show the ownership of life insurance can be distinguished by human capital factor in accordance with the findings of Chen et al. (2005). Chen et al. (2005) states that the higher the value of human capital will be higher demand for life insurance. The high value of human capital represented higher the purchasing power.

Ability to earn income (human capital) in this study measured by age and education levels. Better education makes an individual has a better competitiveness in the labor market. Higher education allows a person to have a better ability to earn income. At productive age a person can have a better opportunity than older age. At certain occupations that require higher education skills, combination of experience and individual ability resulted in the ability to earn income increases. Age is usually followed by a declining state of health and labor productivity. Individuals who recognize this will prepare to face the risks that will occur. This preparation can be realized in the form of life insurance ownership, storage or other property investment.

Human capital as a differentiating factor of life insurance ownership also caused life insurance has not become the primary needs of the people of Indonesia. Life insurance is a product to be purchased only if there is excess revenue. With income levels about $ 3004.9 per capita in 2010 only 18.8% of spending level for insurance expense and taxes. More than 51% of the population spending still used for food consumption. This finding is in line with the results of Li at.al (2007) who stated that income plays a major role in the consumption of life insurance product.

Based on the significance of the bequest motive variables is less than $\alpha = 0.05$, it can be concluded that there is difference bequest motive between groups who have life insurance with that does not have life insurance. Strong motive can be driving behavior. Motives for leaving a bequest in the form of life insurance, encourages buying behavior of life insurance. Sense of responsibility for his children is driving desired to leave bequest. The desire to leave bequest can also be measured by the amount of wealth owned by the respondent or his family. Because some people leave bequest in the form of real assets, so how many real asset their collection indicated that they were eager to leave bequest. This finding is in line with Hurd (1987) that someone is said to have a bequest if he (or she) cares about the welfare of the recipients of his estate.

The significant value of insurance awareness's variable is 0,000. It is mean that there is a difference in awareness of insurance between those who have life insurance with a group that did not have life insurance. Insurance's awareness in this study was measured from the understanding and knowledge of life insurance products. The knowledge of insurance can be obtained from various sources of information. Variety of information about life insurance can be easily obtained by the public. For examples they can get from the internet, journals, magazines, or from others. This knowledge will spur people to know more about life insurance.

Individual understanding measured from an understanding of the insurance contract, the rights and obligations. Lack of law knowledge make people do not trust the insurance companies. Most of those who purchase insurance are those who understand the legal aspect of this. Individuals can gain an understanding more after purchasing insurance, but without consumption of life insurance they also can have it if they have understood about law aspect of life insurance contract.

The fact that human capital, bequest motives and insurance awareness as a distinguishing variable between those who have life insurance with a group that did not have life insurance is reinforced by the relationship between these variables with the function of discrimination, as shown in Table 3.3 below:

Table 3.3: Structure Matrix

	Function
	1
awareness	.866
bequestmot	.512
Humancapital	.456
absoluterisk	.043

Awareness of life insurance as a distinctive factor between groups which has insurance with a group that did not have insurance is very strong. As shown in Table 3.3 above the value of the correlation between awareness of insurance with the discriminant function of 0.807, meaning there is a strong association between awareness of insurance with the discriminant function is formed. Individuals who are aware of their need for risk protection and availability of products to meet these needs would encourage individual to have life insurance.

There is a correlation between the discriminant equation to distinguish life insurance's ownership between group based on bequest motive and human capital represented by the large of correlation coefficient each for 0.512 and 0.456. Life insurance's ownership is one of the positive behaviour of insurance awareness. This is according to what was said by Strong (1998) that a positive attitude towards something shows an awareness of it.

The result shows that the risk attitude, measured of absolute risk aversion *does not* distinguish between those who have life insurance with a group that did not have life insurance. In addition to the value indicated by the significance of Wilks' Lambda (greater than 0,05), this is reinforced by the weak value of correlation coefficient (0.043) which means there is no relationship between absolute risk aversion with the existing discriminant function. The value of Wilks' Lambda also indicates that there are similarities between the risk attitude of respondents who have life insurance that does not have life insurance.

Because life insurance ownership is not determined by the level of risk attitude, the insurer may consider the consumer as a single entity that is risk aversion individuals. Assumed that all consumer are risk averse, it is mean consumers are willing divert the risk to another party. Here lies the meeting point between consumers and insurance companies because insurance companies engaged in this field. The company can sell various types of insurance without restrictions on the attitude towards risk. On the other hand because life insurance is a product related to risk, would be much easier for companies to make products according to consumer's risk preferences.

Although the risk attitude variables did not distinguish the ownership group of life insurance, all of Wikls' Lambda variables are significant and equal to 0.000. So it concluded that there is a difference between the groups has a group life insurance that does not have life insurance.

Human capital, bequest motive and awareness of insurance are factors distinguishing these groups. These results are consistent with the theory of purchasing decisions are expressed by Engel et al. (1995) that the factors that determine the purchasing decision is the individual factors, environmental influences and psychology. Human capital and awareness of insurance showing individual factors, bequest motives are psychological factors. Assuming ownership of insurance showing the demand for life insurance, then the hypothesis that human capital, bequest motive, absolute risk aversion and insurance awareness is a predictor of demand for insurance is acceptable.

IV. Conclusion

There are differences between individuals who have life insurance with individuals that have no life insurance. The differences in life insurance ownership are mainly due to individual differences that exist. Human capital, bequest motives and f insurance awareness are variables that distinguishing between those who have life insurance with a group that did not have life insurance.

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